

What is claimed is:

1. A method of determining biliverdin concentration in a sample from an avian or reptilian species comprising:
  - a) contacting the sample with biliverdin reductase;
  - b) measuring a change in absorbance at about 325 to about 500 nm; and
  - c) determining biliverdin concentration by comparing the absorbance value obtained in step b) with absorbance values on a standard concentration curve.
2. A method of measuring increased biliverdin concentration in a sample from an avian or reptilian species comprising:
  - a) contacting the sample with biliverdin reductase; and
  - b) measuring a change in absorbance at about 325 nm to about 500 nm, wherein a change in absorbance as compared to a control sample indicates increased biliverdin concentration in the sample.
3. A method of measuring above-normal levels of biliverdin concentration in a sample from an avian or reptilian species comprising:
  - a) contacting the sample with biliverdin reductase; and
  - b) measuring a change in absorbance at about 325 nm to about 500 nm, wherein a change in absorbance as compared to values obtained from a control sample indicates an above-normal biliverdin concentration in the sample.
4. A method of determining biliverdin concentration in a sample from an avian or reptilian species comprising:
  - a) contacting the sample with biliverdin reductase;
  - b) measuring a change in absorbance at about 500 nm to about 750 nm; and
  - c) determining biliverdin concentration by comparing the absorbance value obtained in step b) with absorbance values on a standard concentration curve.

5. A method of measuring increased biliverdin concentration in a sample from an avian or reptilian species comprising:
  - a) contacting the sample with biliverdin reductase; and
  - b) measuring a change in absorbance at about 500 to about 750 nm, wherein a change in absorbance as compared to a control sample indicates increased biliverdin concentration in the sample.
6. A method of measuring above-normal levels of biliverdin concentration in a sample from an avian or reptilian species comprising:
  - a) contacting the sample with biliverdin reductase; and
  - b) measuring a change in absorbance at about 500 nm to about 750 nm, wherein a change in absorbance as compared to values obtained from a control sample indicates an above-normal biliverdin concentration in the sample.
7. A kit for measuring biliverdin concentration in a sample comprising:
  - a) biliverdin reductase;
8. The kit of claim 7, further comprising a phosphate buffer.
9. The kit of claim 7, further comprising NADH.
10. The kit of claim 7, further comprising biliverdin.